

CLAIMS

What is claimed is:

1. A method for accessing data over a network having a plurality of network stations, the method comprising the steps of:

storing, at a first of the plurality of network stations,
5 information identifying data which is available at a second of the plurality of network stations, the second network station being different than the first network station;

generating, at the first network station, a signal representing the information identifying the available data
10 and linking information to the second network station; and

transmitting the signal to a third of the plurality of network stations, the third network station being different than the first and the second network stations;

wherein the transmitted linking information is operable
15 at the third network station to establish a network link over
which the identified available data is transmittable from the
second network station to the third network station.

2. The method according to claim 1, further comprising
the step of:

receiving a request for data;

wherein the signal is generated responsive to the receipt
5 of the request.

3. The method according to claim 2, wherein the request
includes an identification of a user and further comprising
the step of:

authenticating the user.

4. The method according to claim 3, wherein the signal
is generated after the user is authenticated.

5. The method according to claim 2, wherein the request is received from the third network station.

6. The method according to claim 2, further comprising the step of:
logging the request.

7. The method according to claim 1, further comprising the step of:
storing the identified available data at the second network station.

8. The method according to claim 1, further comprising the step of:

receiving, at the first network station, a notification that the identified available data was transmitted from the
5 second network station to the third network station.

9. The method according to claim 1, further comprising the step of:

logging at least some events that occur within the network.

10. The method according to claim 9, further comprising the step of:

providing access to the logged events to an entity located outside of the network.

11. The method according to claim 1, wherein the identified available data is transmittable from the second network station directly to the third network station over the network link.

12. The method according to claim 1, wherein the identified available data is transmittable from the second network station to the third network station so as to be displayed in a presentation format.

13. The method according to claim 12, wherein the presentation format is an internet web page .

14. The method according to claim 12, wherein the presentation format is a frame of an internet web page.

15. The method according to claim 1, further comprising the step of:

providing the identified available data to the second network station.

16. The method according to claim 15, wherein the identified available data is provided to the second network station by an entity located outside of the network.

17. The method according to claim 1, wherein the identified available data is identified available first data, wherein the linking information is first linking information, wherein the network link is a first network link, further
5 comprising the step of:

storing, at the first of the plurality of network stations, further information identifying second data which is available at a fourth of the plurality of network stations, the fourth network station being different than the first, the
10 second, and the third network stations;

wherein the generated signal further represents the further information identifying the available second data and second linking information to the fourth network station;

wherein the transmitted second linking information is
15 operable at the third network station to establish a second network link over which the identified available second data is transmittable from the fourth network station to the third network station.

18. The method according to claim 17, further comprising the step of:

receiving a request for data;

wherein the signal is generated responsive to the receipt
5 of the request.

19. The method according to claim 18, wherein the request includes an identification of a user and further comprising the step of:

authenticating the user.

20. The method according to claim 19, wherein the signal is generated after the user is authenticated.

21. The method according to claim 18, wherein the request is received from the third network station.

22. The method according to claim 18, further comprising the step of:

logging the request.

23. The method according to claim 17, further comprising the step of:

storing the identified available first data at the second network station; and

5 storing the identified available second data at the
fourth network station.

24. The method according to claim 17, further comprising
the step of:

receiving, at the first network station, a first
notification that the identified available first data was
5 transmitted from the second network station to the third
network station; and

receiving, at the first network station, a second
notification that the identified available second data was
transmitted from the fourth network station to the third
10 network station.

25. The method according to claim 17, further comprising
the step of:

logging at least some events that occur within the
network.

26. The method according to claim 25, further comprising the step of:

providing access to the logged events to an entity located outside of the network.

27. The method according to claim 17, wherein the identified available first data is transmittable from the second network station directly to the third network station over the first network link, and wherein the identified
5 available second data is transmittable from the fourth network station directly to the third network station over the second network link.

28. The method according to claim 17, wherein the identified available first data is transmittable from the second network station to the third network station so as to be displayed in a first presentation format, and wherein the
5 identified available second data is transmittable from the fourth network station to the third network station so as to be displayed in a second presentation format.

29. The method according to claim 28, wherein the first and the second presentation formats are internet web pages.

30. The method according to claim 28, wherein the first and the second presentation formats are frames of an internet web page.

31. The method according to claim 17, further comprising the steps of:

providing the identified available first data to th second network station; and

5 providing the identified available second data to the fourth network station.

32. The method according to claim 31, wherein the identified available first data is provided to the second network station by a first entity located outside of the network, wherein the identified available second data is

5 provided to the fourth network station by a second entity located outside of the network.

33. A method for electronically presenting and paying bills in a network having a plurality of network stations, the method comprising the steps of:

5 storing, at a first of the plurality of network stations, information identifying a bill which is available at a second of the plurality of network stations, the second network station being different than the first network station;

receiving, from a third of the plurality of network stations, a request for the information identifying the available bill, the third network station being different than the first and the second network stations;

10 authenticating the request from the third network station;

generating, at the first network station, a signal
15 representing the information identifying the available bill and linking information to the second network station, the linking information being operative at the third network

station to establish a network link over which the identified
available bill is transmittable from the second network
20 station to the third network station;

transmitting the signal to the third network station;
receiving, at the first network station, a notification
that the identified available bill was transmitted from the
second network station to the third network station; and
25 logging at least some of the aforementioned steps.

34. An apparatus for accessing data over a network
having a plurality of network stations, the apparatus
comprising:

a first storer for storing, at a first of the plurality
5 of network stations, information identifying data which is
available at a second of the plurality of network stations,
the second network station being different than the first
network station;

10 a first generator for generating, at th first network station, a signal representing the information identifying th available data and linking information to th second network station; and

15 a first transmitter for transmitting the signal to a third of the plurality of network stations, the third network station being different than the first and the second network stations;

20 wherein the transmitted linking information is operable at the third network station to establish a network link over which the identified available data is transmittable from the second network station to the third network station.

35. The apparatus according to claim 34, further comprising:

a receiver for receiving a request for data;
wherein the signal is generated responsive to the receipt
5 of the request.

36. The apparatus according to claim 35, wherein the request includes an identification of a user and further comprising:

an authenticator for authenticating the user.

37. The apparatus according to claim 36, wherein the signal is generated after the user is authenticated.

38. The apparatus according to claim 35, wherein the request is received from the third network station.

39. The apparatus according to claim 35, further comprising:

a logger for logging the request.

40. The apparatus according to claim 34, further comprising:

a second storer for storing the identified available data at the second network station.

41. The apparatus according to claim 34, further comprising:

a receiver for receiving, at the first network station, a notification that the identified available data was
5 transmitted from the second network station to the third network station.

42. The apparatus according to claim 34, further comprising:

a logger for logging at least some events that occur within the network.

43. The apparatus according to claim 42, further comprising:

a provider for providing access to the logged events to an entity located outside of the network.

44. The apparatus according to claim 34, wherein the identified available data is transmittable from the second network station directly to the third network station over the network link.

45. The apparatus according to claim 34, wherein the identified available data is transmittable from the second network station to the third network station so as to be displayed in a presentation format.

46. The apparatus according to claim 45, wherein the presentation format is an internet web page.

47. The apparatus according to claim 45, wherein the presentation format is a frame of an internet web page.

48. The apparatus according to claim 34, further comprising:

a provider for providing the identified available data to the second network station.

49. The method according to claim 48, wherein the identified available data is provided to the second network station by an entity located outside of the network.

50. The apparatus according to claim 34, wherein the identified available data is identified available first data, wherein the linking information is first linking information, wherein the network link is a first network link, further comprising:

5 a second storer for storing, at the first of the plurality of network stations, further information identifying second data which is available at a fourth of the plurality of network stations, the fourth network station being different
10 than the first, the second, and the third network stations;

wherein the generated signal further represents the further information identifying the available second data and second linking information to the fourth network station;

wherein the transmitted second linking information is
15 operable at the third network station to establish a second
network link over which the identified available second data
is transmittable from the fourth network station to the third
network station.

51. The apparatus according to claim 50, further
comprising:

a receiver for receiving a request for data;

wherein the signal is generated responsive to the receipt
5 of the request.

52. The apparatus according to claim 51, wherein the
request includes an identification of a user and further
comprising:

an authenticator for authenticating the user.

53. The apparatus according to claim 52, wherein the
signal is generated after the user is authenticated.

54. The apparatus according to claim 51, wherein the request is received from the third network station.

55. The apparatus according to claim 51, further comprising:

a logger for logging the request.

56. The apparatus according to claim 50, further comprising:

a third storer for storing the identified available first data at the second network station; and

5 a fourth storer for storing the identified available second data at the fourth network station.

57. The apparatus according to claim 50, further comprising:

a first receiver for receiving, at the first network station, a first notification that the identified available
5 first data was transmitted from the second network station to the third network station; and

a second receiver for receiving, at the first network station, a second notification that the identified available second data was transmitted from the fourth network station to the third network station.

10

58. The apparatus according to claim 50, further comprising:

a logger for logging at least some events that occur within the network.

59. The apparatus according to claim 58, further comprising:

a provider for providing access to the logged events to an entity located outside of the network.

60. The apparatus according to claim 50, wherein the identified available first data is transmittable from the second network station directly to the third network station over the first network link, and wherein the identified available second data is transmittable from the fourth network

5

station directly to the third network station over the second network link.

61. The apparatus according to claim 50, wherein the identified available first data is transmittable from the second network station to the third network station so as to be displayed in a first presentation format, and wherein the
5 identified available second data is transmittable from the fourth network station to the third network station so as to be displayed in a second presentation format.

62. The apparatus according to claim 61, wherein the first and the second presentation formats are internet web pages.

63. The apparatus according to claim 61, wherein the first and the second presentation formats are frames of an internet web page.

64. The apparatus according to claim 50, further comprising:

a first provider for providing the identified available first data to the second network station; and

5 a second provider for providing the identified available second data to the fourth network station.

65. The apparatus according to claim 64, wherein the identified available first data is provided to the second network station by a first entity located outside of the network, wherein the identified available second data is
5 provided to the fourth network station by a second entity located outside of the network.

66. An apparatus for electronically presenting and paying bills in a network having a plurality of network stations, the apparatus comprising:

a storer for storing, at a first of the plurality of
5 network stations, information identifying a bill which is available at a second of the plurality of network stations,

th second network station being different than the first network station;

10 a first receiver for receiving, from a third of th plurality of network stations, a request for the information identifying the available bill, the third network station being different than the first and the second network stations;

15 an authenticator for authenticating the request from the third network station;

a generator for generating, at the first network station, a signal representing the information identifying the available bill and linking information to the second network station, the linking information being operative at the third
20 network station to establish a network link over which the identified available bill is transmittable from the second network station to the third network station;

a transmitter for transmitting the signal to the third network station;

25 a second receiver for receiving, at the first network
station, a notification that the identified available bill was
transmitted from the second network station to the third
network station; and
a logger for logging at least some of the aforementioned
30 steps.

67. An article of manufacture for accessing data over a
network having a plurality of network stations, the article of
manufacture comprising:

a computer readable storage medium; and
5 computer programming stored on the storage medium;
wherein the stored computer programming is configured to be
readable from the computer readable storage medium by at least
one computer and thereby cause the at least one computer to
operate so as to:
10 store, at a first of the plurality of network stations,
information identifying data which is available at a second of
the plurality of network stations, the second network station
being different than the first network station;

generate, at th first network station, a signal
15 representing the information identifying the available data
and linking information to the second network station; and

transmit the signal to a third of the plurality of
network stations, the third network station being different
than the first and the second network stations;

20 wherein the transmitted linking information is operabl
at the third network station to establish a network link over
which the identified available data is transmittable from the
second network station to the third network station.

68. The article of manufacture according to claim 67,
further causing the at least one computer to operate so as to:

receive a request for data;

wherein the signal is generated responsive to the receipt
5 of the request.

69. The article of manufacture according to claim 68, wherein the request includes an identification of a user, and further causing the at least one computer to operate so as to: authenticate the user.

70. The article of manufacture according to claim 69, wherein the signal is generated after the user is authenticated.

71. The article of manufacture according to claim 68, wherein the request is received from the third network station.

72. The article of manufacture according to claim 68, further causing the at least one computer to operate so as to: log the request.

73. The article of manufacture according to claim 67, further causing the at least one computer to operate so as to: store the identified available data at the second network station.

74. The article of manufacture according to claim 67, further causing the at least one computer to operate so as to: receive, at the first network station, a notification that the identified available data was transmitted from the
5 second network station to the third network station.

75. The article of manufacture according to claim 67, further causing the at least one computer to operate so as to: log at least some events that occur within the network.

76. The article of manufacture according to claim 75, further causing the at least one computer to operate so as to: provide access to the logged events to an entity located outside of the network.

77. The article of manufacture according to claim 67, wherein the identified available data is transmittable from the second network station directly to the third network station over the network link.

78. The article of manufacture according to claim 67, wherein the identified available data is transmittable from the second network station to the third network station so as to be displayed in a presentation format.

79. The article of manufacture according to claim 78, wherein the presentation format is an internet web page.

80. The article of manufacture according to claim 78, wherein the presentation format is a frame of an internet web page.

81. The article of manufacture according to claim 67, further causing the at least one computer to operate so as to:
provide the identified available data to the second network station.

82. The article of manufacture according to claim 81, wherein the identified available data is provided to the second network station by an entity located outside of the network.

83. The article of manufacture according to claim 67, wherein the identified available data is identified available first data, wherein the linking information is first linking information, wherein the network link is a first network link,
5 further causing the at least one computer to operate so as to:
store, at the first of the plurality of network stations, further information identifying second data which is available at a fourth of the plurality of network stations, the fourth network station being different than the first, the second,
10 and the third network stations;

wherein the generated signal further represents the further information identifying the available second data and second linking information to the fourth network station;

wherein the transmitted second linking information is
15 operable at the third network station to establish a second network link over which the identified available second data is transmittable from the fourth network station to the third network station.

84. The article of manufacture according to claim 83, further causing the at least one computer to operate so as to:

receive a request for data;

wherein the signal is generated responsive to the receipt
5 of the request.

85. The article of manufacture according to claim 84, wherein the request includes an identification of a user and further causing the at least one computer to operate so as to:
authenticate the user.

86. The article of manufacture according to claim 85, wherein the signal is generated after the user is authenticated.

87. The article of manufacture according to claim 84, wherein the request is received from the third network station.

88. The article of manufacture according to claim 84, further causing the at least one computer to operate so as to:
log the request.

89. The article of manufacture according to claim 83, further causing the at least one computer to operate so as to:
store the identified available first data at the second network station; and

5 store the identified available second data at the fourth network station.

90. The article of manufacture according to claim 83, further causing the at least one computer to operate so as to:

receive, at the first network station, a first notification that the identified available first data was
5 transmitted from the second network station to the third network station; and

receive, at the first network station, a second notification that the identified available second data was
transmitted from the fourth network station to the third
10 network station.

91. The article of manufacture according to claim 83, further causing the at least one computer to operate so as to:

log at least some events that occur within the network.

92. The article of manufacture according to claim 91, further causing the at least one computer to operate so as to:

provide access to the logged events to an entity located outside of the network.

93. The article of manufacture according to claim 83, wherein the identified available first data is transmittabl from the second network station directly to the third n twork station over the first network link, and wherein th
5 identified available second data is transmittable from th fourth network station directly to the third network station over the second network link.

94. The article of manufacture according to claim 83, wherein the identified available first data is transmittable from the second network station to the third network station so as to be displayed in a first presentation format, and
5 wherein the identified available second data is transmittabl from the fourth network station to the third network station so as to be displayed in a second presentation format.

95. The article of manufacture according to claim 94, wherein the first and the second presentation formats are internet web pages.

96. The article of manufacture according to claim 94, wherein the first and the second presentation formats are frames of an internet web page .

97. The article of manufacture according to claim 83, further causing the at least one computer to operate so as to:
provide the identified available first data to the second network station; and

5 provide the identified available second data to the fourth network station.

98. The article of manufacture according to claim 97, wherein the identified available first data is provided to the second network station by a first entity located outside of the network, wherein the identified available second data is
5 provided to the fourth network station by a second entity located outside of the network.

99. An article of manufacture for electronically presenting and paying bills in a network having a plurality of network stations, the article of manufacture comprising the steps of:

5 a computer readable storage medium; and

computer programming stored on the storage medium; wherein the stored computer programming is configured to be readable from the computer readable storage medium by at least one computer and thereby cause the at least one computer to
10 operate so as to:

store, at a first of the plurality of network stations, information identifying a bill which is available at a second of the plurality of network stations, the second network station being different than the first network station;

15 receive, from a third of the plurality of network stations, a request for the information identifying the available bill, the third network station being different than the first and the second network stations;

authenticate the request from the third network station;

20 generat , at the first network station, a signal
representing the information identifying the available bill
and linking information to the second network station, the
linking information being operative at the third network
station to establish a network link over which the identified
25 available bill is transmittable from the second network
station to the third network station;

transmit the signal to the third network station;
receive, at the first network station, a notification
that the identified available bill was transmitted from the
30 second network station to the third network station; and
log at least some of the aforementioned steps.